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36. (New) The communication device of claim 34, wherein:
said controller considers signal strength related parameters of the identified pilot signals to select pilot signals to be tracked by said pilot tracking unit.

37. (New) The communication device of claim 34, wherein:
said controller considers priorities given to certain base stations to select pilot signals to be tracked by said pilot tracking unit.

CONT

38. (New) The communication device of claim 34, wherein:
said controller is programmed to periodically reevaluate a decision to track a particular pilot signal within said pilot tracking unit.

39. (New) The communication device of claim 34, wherein:
said predetermined selection criterion permits both affiliated and non-affiliated base stations to be tracked by said pilot tracking unit.

40. (New) The communication device of claim 34, wherein:
said predetermined selection criterion permits all pilot signals identified by said searcher to be selected for tracking.

41. (New) A communication device for use within a communication system implementing code division multiple access (CDMA), comprising:

a pilot tracking unit to continuously track selected pilot signals associated with a plurality of base stations;

at least one rake receiver to demodulate data within a received signal that is associated with a user of the communication device, said at least one rake receiver having a plurality of rake fingers;
and

a controller to assign rake fingers within said at least one rake receiver to individual paths associated with the received signal based on information developed by the pilot tracking unit.

42. (New) The communication device of claim 41 wherein:

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said selected pilot signals are selected based upon a selection criterion that permits a pilot signal that is not assigned to a rake finger of said at least one rake receiver to be tracked by said pilot tracking unit.

43. (New) The communication device of claim 41 wherein:

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said controller dynamically assigns rake fingers to individual paths based on a predetermined assignment criterion.

44. (New) The communication device of claim 43 wherein:

said predetermined assignment criterion considers the resources available within said at least one rake receiver.

45. (New) The communication device of claim 43 wherein:

said predetermined assignment criterion considers a signal strength related parameter associated with pilot signals tracked by the pilot tracking unit.

46. (New) The communication device of claim 41 wherein:

said controller is programmed to determine whether an assignment of a rake finger will be a long-term assignment or a dynamic assignment.

47. (New) The communication device of claim 41 wherein:

said pilot tracking unit continuously tracks said selected pilot signals for timing and channel information.

48. (New) The communication device of claim 41 wherein:

said pilot tracking unit continuously tracks said selected pilot signals for timing, channel, and frequency information.

49. (New) A wireless communication system comprising:

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a network controller to make a soft handoff decision for a communication device based on base station related information received from the communication device, said base station related information being assembled within the communication device by continuously tracking selected base station pilot signals received by the communication device, said selected base station pilot signals sometimes including one or more pilot signals that are not assigned to rake fingers within said communication device, said network controller to deliver soft handoff information to said communication device after said soft handoff decision has been made.

CONT
50. (New) The wireless communication system of claim 49, wherein:

said base station related information includes detailed signal strength reports for base stations about the communication device.

51. (New) The wireless communication system of claim 49, wherein:

said base station related information includes multi-path diversity information for base stations about the communication device.

52. (New) The wireless communication system of claim 49, wherein:

said base station related information includes antenna diversity information for base stations about the communication device.

53. (New) The wireless communication system of claim 49, wherein:

said base station related information includes signal strength reports for base stations about the communication device that have been modified based on at least one of the following: multi-path diversity information for base stations about the communication device and antenna diversity information for base stations about the communication device.

54. (New) The wireless communication system of claim 49, wherein:
said soft handoff information includes information identifying members of an active set of base stations for the communication device.

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55. (New) A method for use within a wireless communication system comprising:
obtaining base station related information that was assembled by continuously tracking selected base station pilot signals received by a communication device, said selected base station pilot signals including a pilot signal that is not presently assigned to a rake finger within the communication device; and

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choosing an active set of base stations for the communication device based on said base station related information.

56. (New) The method of claim 55, wherein:
said base station related information includes detailed signal strength reports for base stations about the communication device.

57. (New) The method of claim 55, wherein:
said base station related information includes multi-path diversity information for base stations about the communication device.

58. (New) The method of claim 55, wherein:
said base station related information includes antenna diversity information for base stations about the communication device.

59. (New) The method of claim 55, wherein:
said base station related information includes signal strength reports for base stations about the communication device that have been modified based on at least one of the following: multi-path diversity information for base stations about the communication device and antenna diversity information for base stations about the communication device.

60. (New) The method of claim 55, wherein:
obtaining base station related information and choosing an active set of base stations are performed at a network location within the wireless communication system.

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61. (New) The method of claim 60, further comprising:
transmitting information identifying said active set of base stations to the communication device.

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62. (New) A method for use within a wireless communication system comprising:
continuously tracking selected pilot signals received by a communication device from a plurality of base stations to generate base station information, said selected pilot signals including a pilot signal that is not presently assigned to a rake finger within the communication device; and
selecting a base station to transmit data to the communication device in a site selection diversity transmission (SSDT) mode of operation based on said base station information.

63. (New) The method of claim 62, wherein:
continuously tracking includes continuously tracking said pilot signals for timing and channel information.

64. (New) The method of claim 62, wherein:
continuously tracking includes continuously tracking said pilot signals for timing, channel, and frequency information.

65. (New) The method of claim 62, wherein:
said pilot signals that are continuously tracked are selected for continuous tracking from pilot signals identified by a searcher within the communication device.

66. (New) The method of claim 62, wherein:
selecting a base station is performed within the communication device.

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67. (New) A method for use within a wireless communication system comprising:
continuously tracking selected pilot signals received by a communication device from a plurality of base stations to generate base station information, said selected pilot signals including a pilot signal that is not presently assigned to a rake finger within the communication device; and
estimating a position of the communication device based on said base station information.
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68. (New) The method of claim 67, comprising:
dynamically adjusting the pilot signals that are selected for continuous tracking.
69. (New) The method of claim 67, wherein:
estimating a position of the communication device includes using time difference of arrival (TDOA) techniques.
70. (New) The method of claim 67, wherein:
estimating a position of the communication device is performed within the communication device.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney John Scott at 480/563-1364 or the below signed attorney to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

PRELIMINARY AMENDMENT

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 28 day of June, 2002.

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